

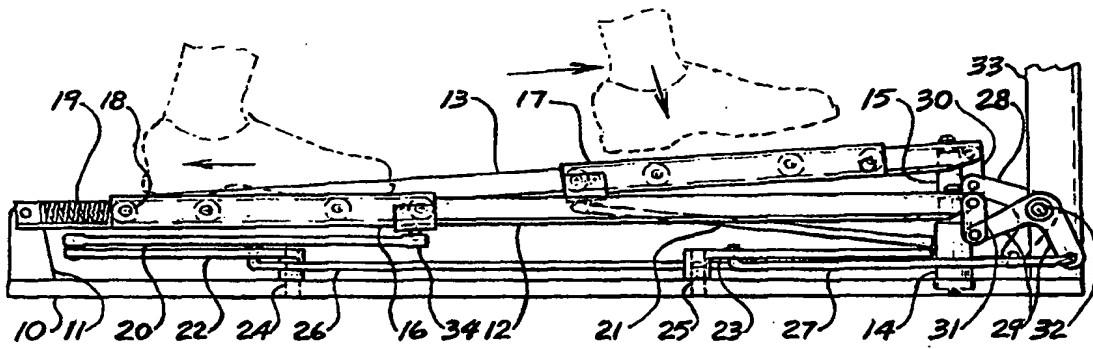


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(54) Title: AUTOMATICALLY VARIABLE STRIDE WALK-RUN-STEPPER PEDAL EXERCISER



(57) Abstract

This new foot pad or pedal type exerciser allows for normal walking, jogging, and running in place on pedals (16, 17) reciprocal primarily back and forth, and provides means for returning the pedal from varying stride lengths to a forward step-down position in response to a user's end of stride action of stepping down on the forward pedal and lifting the other foot from the rear pedal. Improved step impact cushioning is provided compared to treadmills, the only other exerciser allowing variable length normal stepping type strides, with cushion means (14, 15) on or under the pedal, some versions providing vertical pedal deflection means (40, 41) to both reduce step-down forces and provide energy to return to the opposite pedal. Mechanical and pneumatic versions are described, as are user powered and motorized versions, both types providing automatic stride length and speed variation and stopping means (131, 132) responding to the user's foot force.